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FISH & RICHARDSON, P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022			SILVER, DAVID	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

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Continuation of item 11:

1. The Instant Application, as claimed, is not currently in condition for allowance.

***35 U.S.C. § 101***

**2. Applicants argue:**

"Claims 1, 3, 5-7, 11, 12, and 21-31 stand rejected under 35 U.S.C. § 101 as being allegedly directed to non-statutory subject matter. The office action asserts that the pending claims merely recite a software algorithm which does not display, store, or otherwise provide a useful, tangible output. The office action also asserts that the claims are not drawn to a practical, real-world application. Contrary to the assertions in the office action, the pending claims recite several useful, tangible outputs that have practical, real-world application. For example, the claims recite a method that produces first and second prediction results and stores state information. As discussed in Applicant's specification, the stored state information can be used to generate prediction results that may improve interactions between call-center agents and customers. Specification, ¶ 13. Thus, the claims produce useful, tangible results that have real-world application. As such, the claims are directed to statutory subject matter, and Applicant respectfully requests that the Examiner withdraw the rejection." (Remarks: page 2)

**3. Examiner Response:**

Applicants' remarks have been fully considered and are persuasive in view of the Office's new position with respect to 35 U.S.C. § 101. The claims are tied to a statutory device (computer). Accordingly, the 35 U.S.C. § 101 rejections have been withdrawn.

***35 U.S.C. § 103***

**4. Applicants argue:**

- 4.1 "Applicant's claims are patentable over the cited references because the references do not disclose or suggest all elements of Applicant's claims. For example, the cited references fail to teach or suggest "using the stored state information to select a second decision tree node by traversing the decision tree beginning at a decision tree node referenced by the stored state information" and "using the second decision tree node, the stored state information, and the second input value set to compute a

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second prediction result." For at least these reasons, Applicant's claims are allowable over the cited references." (Remarks: page 2)

4.2 "As an initial matter, such general statements regarding obviousness are not commensurate with the subject matter claimed. Applicants do not merely claim reusing state information as implied in the office action. The claims recite using state information from the computation of a first prediction result to select a second decision tree node by traversing the decision tree beginning at the decision tree node referenced by the stored state information. The broad, general statement in the office action "that it would have been obvious to store and reuse the state information" ignores these limitations." (Remarks: page 2 bottom -3 top)

4.3 "In addition, one of skill in the art would not have recognized that the results of the combination were predictable. Applicant's claims do not merely recite combining a decision tree with a cache as suggested by the office action. As noted above, the claims recite "using the stored state information to select a second decision tree node by traversing the decision tree beginning at a decision tree node referenced by the stored state information," where the stored state information is "generated from the computation of a first prediction result." Nowhere does the office action explain how combining a decision tree with a cache would result in the claimed subject matter." (Remarks: page 3)

4.4 "Moreover, Tamayo also fails to teach or suggest "using the second decision tree node, the stored state information, and the second input value set to compute a second prediction result."" (Remarks: page 3)

4.5 "Like Tamayo, Belniak is silent regarding "using the second decision tree node, the stored state information, and the second input value set to compute a second prediction result." Indeed, the office action does not explicitly assert that Belniak teaches this limitation or any other limitation in the pending claims. To the extent that the office action implies that Belniak teaches this limitation, Applicant notes that Belniak describes "learning a Bayes Net from data." *Id.*, col. 9, lines 42-51.

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Nowhere does Belniak teach or suggest that this process "use[es] the [] ." (Remarks: page 3 bottom -4 top)

5. **Examiner Response:**

5.1 Regarding subsection 1 *supra*, the statement amounts to a general allegation of patentability without specific reference to the documents used.

5.2 Regarding subsection 2 *supra*, the claim limitation, in sum, uses the results of a previous computation to start a new at the same spot as where the previous computation left-off. Firstly, it is noted that the second decision tree node is not necessarily different from original (first) node; therefore, continuing to compute based the first node would anticipate the computing based on the second node. Secondly, the motivation statement provides a summary for why one would have been motivated. The reuse of information saves time required to performing the computation again, and costs associated therewith. The actual limitations were addressed on page 7 of the Office action, reference to **(col: 9 line: 42-51)**, which refers to Belniak.

5.3 Regarding subsection 3 *supra*, the statement amounts to a general allegation without evidence as to why one of ordinary skill in the art would not re-use results for faster computation.

5.4 Regarding subsection 4 *supra*, the claim does not necessitate that the second node and the second prediction result are different from the first node and first prediction result.

5.5 Regarding subsection 5 *supra*, a further review of the cited section recites: "In one embodiment, the RAM database technologies allows storage these intermediate results for reuse, thus speeding up access by 2 orders of magnitude." The reuse correlates to the use of the first computation results in the second computation.

Applicants' arguments have been fully considered but are unpersuasive for the reasons above.

Accordingly, the rejection is maintained.

6. The Instant Application, as claimed, is not currently in condition for allowance.

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/Kamini S Shah/

Supervisory Patent Examiner, Art Unit 2128